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| 09/932,971 | 08/21/2001 | Mihai Rasidescu | P 283087 RP-00184-US2 | 6824 |

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EXAMINER

FLEMING, FAYE M

| | |
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| ART UNIT | PAPER NUMBER |
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3616

DATE MAILED: 04/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,971

Applicant(s)

RASIDESCU ET AL. 

Examiner

Faye Fleming

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) 8-25,33-36,53-55,61,62,65 and 66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,26,27,30-32,37-43,45-52,56-60,63 and 64 is/are rejected.
- 7) ☒ Claim(s) 6,7,28,29 and 44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of figures 4-7 in Paper No. 6 is acknowledged. Claims 8-14, 16, 17, 20-25, 53-55, 61, 62, 65 and 66 are withdrawn from further consideration by the examiner as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5, 15 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Barenyi, et al (3,473,821).

Barenyi, et al teaches a suspension system comprising a torsion control mechanism 15 having a left and right connecting structure (see figure 1), the torsion control mechanism defines an axis of rotation passing through the left and right connecting structure, a left and right swing arms 17 fixedly connected to the left and right connecting structures, respectively. The left and right swing arms are pivotable about the rotation axis defined by the torsion control mechanism (see Col. 2, lines 52-59). The torsion control mechanism includes a transversal arm 23. Each swing arm is capable of pivotal movement about the rotation axis relative to the other swing arm. The left and right swing arms are transverse to the torsion control mechanism. The

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torsion control mechanism is configured to provide a degree of relative pivotal movement between the left and right swing arms and wherein the torsion control mechanism is configured such that the degree of relative pivotal movement provided is variable (see Col. 2, lines 52-59). The suspension system of Barenyi, et al swing arms includes a differential 13 coupled to the left and right swing arms using shafts 22.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barenyi, et al (3,473,821) in view of Klaas (6,471,226).

Barenyi, et al discloses the claimed invention except for the swing arms being made of steel and/or aluminum. Klaas teaches a swing arm being made of steel and/or aluminum (see Col. 4, lines 27-31 and Col. 3, lines 43-47). Based on the teachings of Klaas, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the swing arms of Barenyi, et al to be made of steel and/or aluminum to produce a light weight arm and protect against corrosion.

6. Claims 2, 27, 37-43, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barenyi, et al (3,473,821) in view of Yasunaga, et al (4,770,262). Barenyi, et al discloses the claimed invention except for a vehicle frame. Yasunaga, et al, et al teaches an all terrain vehicle (ATV) frame structure comprising first and second

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frame members 104, 407, respectively; first and second cross members 108 defining a closed perimeter; first suspension mounting point (along 109) and second suspension mounting point 114 wherein the first and second frame members are positioned along a longitudinal centerline of the frame and extends from the first suspension mounting point to the second suspension mounting point. The first member is vertically aligned with the second frame member. The first and second frame members and the first and second cross members have a uniform cross section throughout a length and an identical cross-sectional shape. Yasunaga, et al teaches a rear suspension mounting structure mounted to the second suspension mounting points. As shown in figure 8, the second frame member is bent toward the first frame member proximate one end to provide one of the cross members. The first frame member is a single beam comprising a closed tubular structure. Based on the teachings of Yasunaga, et al, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the suspension system of Barenyi, et al to include a frame to provide support for the suspension system. With respect to claim 37, Barenyi, et al teaches a shock absorber 20 provided on each of the swing arms.

7. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barenyi, et al (3,473,821) in view of Yasunaga, et al (4,770,262) in further in view of Suess (6,241,262).

Barenyi, et al in view of Yasunaga, et al teaches the claimed invention except for universal joints. Suess teaches a suspension system having a swing arm 31 including joints 23. Based on the teachings of Barenyi, et al in view of Yasunaga, et al, it would have been obvious to one having ordinary skill in the art at the time the invention was

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made to modify the combination of Barenyi, et al and Yasunaga, et al to include universal joints to achieve precise wheel suspension of the vehicle. With respect to claims 31 and 32, Barenyi, et al teaches the left and right swing arms including a rear housing having an inner side and an outer side wherein the shafts and the wheels are coupled, respectively (see figure 1).

8. Claims 47-52, 56 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasunaga, et al (4,770,262).

Yasunaga, et al discloses a generally longitudinal extending frame; forward pair of wheels 113; rearward pair of wheels 116 defining a laterally extending rotation axis about which wheels of the respective pair of forward and rearward wheel assemblies rotate; a suspension system including a pair of swing arms 115. The swing arm has a front end pivotally supported on brackets 114 fixed to and projecting rearwardly from the junctions where the lower ends of the center pipes 106 are joined to the rear ends of the lower pipes 107. The axle (not shown) of a pair of rear wheels 116 are supported on the rear end of the swing arm. The swing arms are connected to the rear of the vehicle. The wheel assemblies are disposed behind the pivot axis of the swing arm. The pivot axis of the swing arms is disposed above a lower most portion of the frame, see the figures. With respect to a ratio of the swing arm length to the wheel base length, figure 3 clearly shows the wheel base having a drive chain and it is inherent that the swing arm is mounted with the drive chain and has the same length as the drive chain, therefore the ratio would be approximately 0.31.

9. Claims 57-60 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over in Yasunaga, et al (4,770,262) in view of Barenyi, et al (3,473,821).

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Yasunaga, et al teaches the claimed invention except for a torsion control mechanism. Barenyi, et al teaches a suspension system comprising a torsion control mechanism. Based on the teachings of Barenyi, et al, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the suspension system of Yasunaga, et al to include a torsion control mechanism mounted adjacent an intersection of the transverse member and the lower supporting portion of the frame to provide an even rotation of the vehicle wheel when driving.

Allowable Subject Matter

10. Claims 6, 7, 28, 29 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

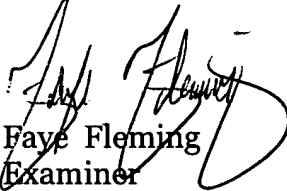
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references each disclose some features in common with the present invention such as suspension systems comprising torsion control mechanisms.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Fleming whose telephone number is (703) 305-0209. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-2571 for regular communications and (703) 308-2571 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

 04/21/03
Faye Fleming
Examiner
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